

ABSTRACT

Lightning at or near the site of an oil storage tank can cause a charge build up in the tank. This charge must be discharged to ground at rapid speeds to prevent arcing, sparks and fire. The tank has a metal floating roof which can be used to discharge the charge to ground by connecting a low impedance braided wire to the floating roof, and then connecting the wire to a take up reel at the top rim of the tank. The take up reel keeps any slack out of the wire. The path to ground is liquid to floating roof, to braided wire, to take up reel, to wall of tank, to earth ground.